Third United Nations International Conference on the Peaceful Uses of Atomic Energy

A/CONF.28/A/754
INDIA
February 1964
Original: ENGLISH

Confidential until official release during Conference

Abstract

ANALYSIS OF OPERATING EXPERIENCE OF A HYDROGEN DISTILLATION PLANT

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A hydrogen distillation plant for the production of heavy water has been operating at Nangal since August 1962. The main problems encountered during the initial commissioning and subsequent operations have been described. Power consumption, refrigeration requirements, gas losses and column efficiencies have been analysed and compared with available literature.

On the basis of data obtained and the present experience of operating a heavy water plant, it is considered that lower production costs can be achieved if hydrogen distillation is carried out under vacuum. Various problems likely to be encountered, their suggested solutions along with process design and estimated operating costs of a new plant are presented in the paper.